Significant copper anomaly identified above two EM conductors at Mt Venn

The anomaly is located around an historic RC hole which returned 2m at 2.13% zinc and 0.39% lead

Great Boulder Resources Limited [ASX: GBR] is pleased to announce it has identified a new base metals target at the Mt Venn prospect within its Yamarna Project in WA.

A recent review of the Mt Venn project highlighted an anomalous intersection in RC drilling which had not been revisited. This hole, 17MVRC004, intersected 12m @ 0.8% Zn, 3.3g/t Ag and 0.16% Pb from 48m, including **2m @ 2.13% Zn, 3.56g/t Ag and 0.39% Pb** from 58m.

The intersection is located more than 900m north of the nearest Cu-Ni sulphide mineralization at Mt Venn. The mineral assemblage is significantly different to previous sulphide intersections in the area, with red-orange sphalerite intergrown with subordinate galena and chalcopyrite[1] contrasting to the typical Mt Venn sulphides of pyrrhotite and chalcopyrite.

To test the significance of this RC result, Great Boulder completed a 140-hole auger program on a 200m by 50m grid (Figure 1), covering 600m of strike in either direction from the RC hole.

This program has outlined a significant copper anomaly with a peak value of 638ppm Cu. To put this in context, the Mt Venn area has a thin layer of soil over a stripped weathering profile, meaning there is only a shallow depth from surface to fresh rock. Previous drilling has identified that Ag, Zn and Pb are typically depleted within the soil profile.

Down-hole EM surveys conducted during the 2017 program identified two off-hole EM conductor plates, shown in yellow on Figure 1. These have not yet been tested by drilling. It is also worth noting all EM plates tested to date at Mt Venn are the result of massive sulphides, with no conductors being caused by graphitic shales or conductive groundwater.

Geological Setting

The sulphides in 17MVRC004 are hosted within gabbronorite, close to a regional structure that offsets the contact between felsic volcanics and the mafics and ultramafics of the Mt Venn greenstone belt. Petrography on rock chips from the mineralized intersection concluded the presence of base metal sulphides “is taken to reflect proximity to a significant structure that provided access to Zn+Pb-carrying hydrothermal fluids unrelated to the host mafic sill” (Crawford, 2017). This observation matches the interpreted geology in the area.

It is still too early to speculate the mineralization style of this Zn-Pb intersection occurrence. If the Zn-Pb sulphides are remobilized from a nearby source within the felsics they may be related to a

[1] Petrographic report by Dr Anthony J Crawford, 16/12/2017

VMS setting, however the nearby DHEM plate sits on the gabbro footwall – which is typical of Mt Venn-style Cu-Ni sulphides. The prospect requires further drilling and/or ground EM surveys to determine its significance.

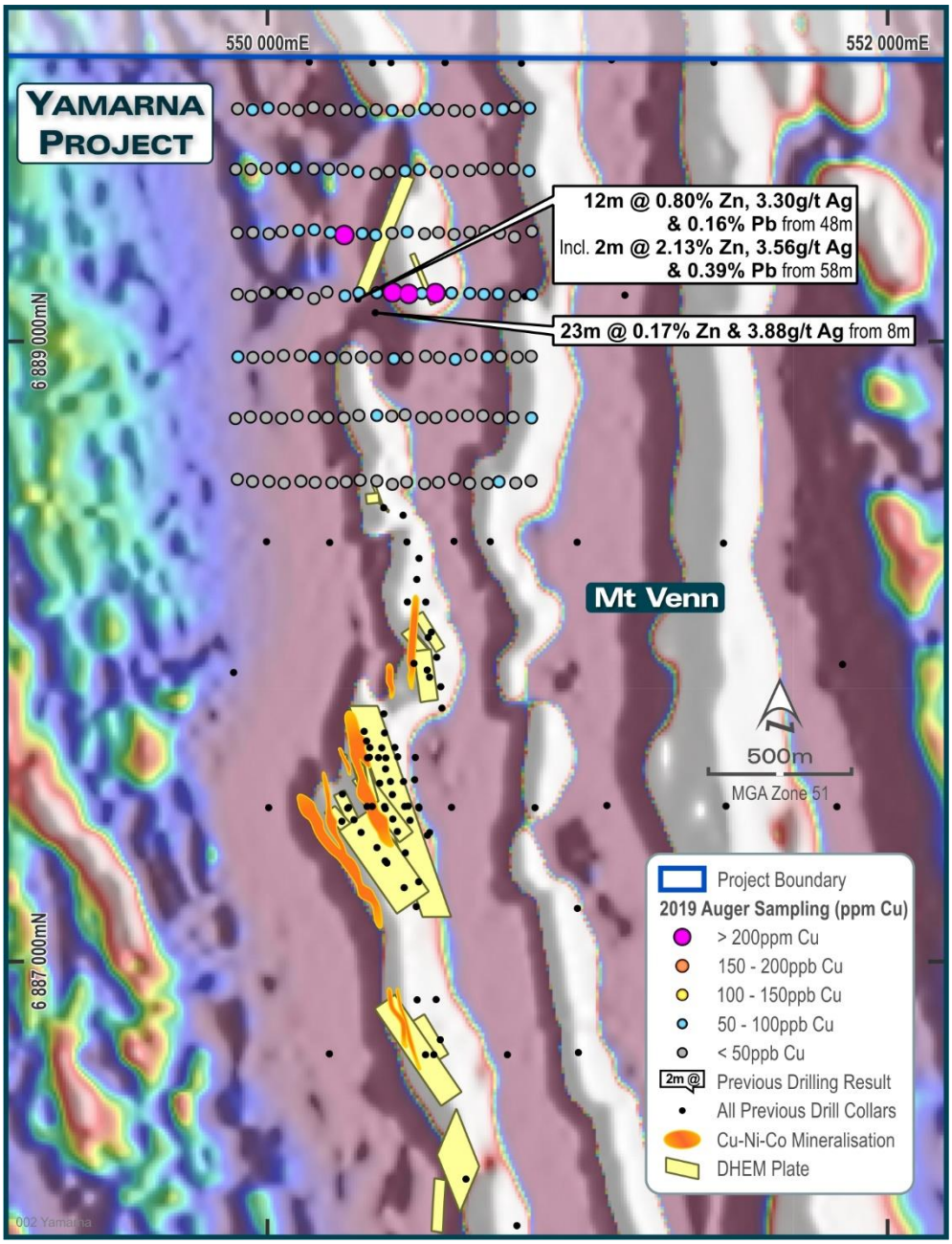

FIGURE 1: MT VENN AUGER ANOMALY. THE COPPER ANOMALY IS 900M NORTH OF PREVIOUS CU-NI INTERSECTIONS AT MT VENN. DHEM CONDUCTOR PLATES SHOWN IN YELLOW.

Next Steps

Further testing will commence during the 2020 field season, in conjunction with other work already scheduled at Winchester and Mt Carlon. This work is expected to commence in March-April 2020.

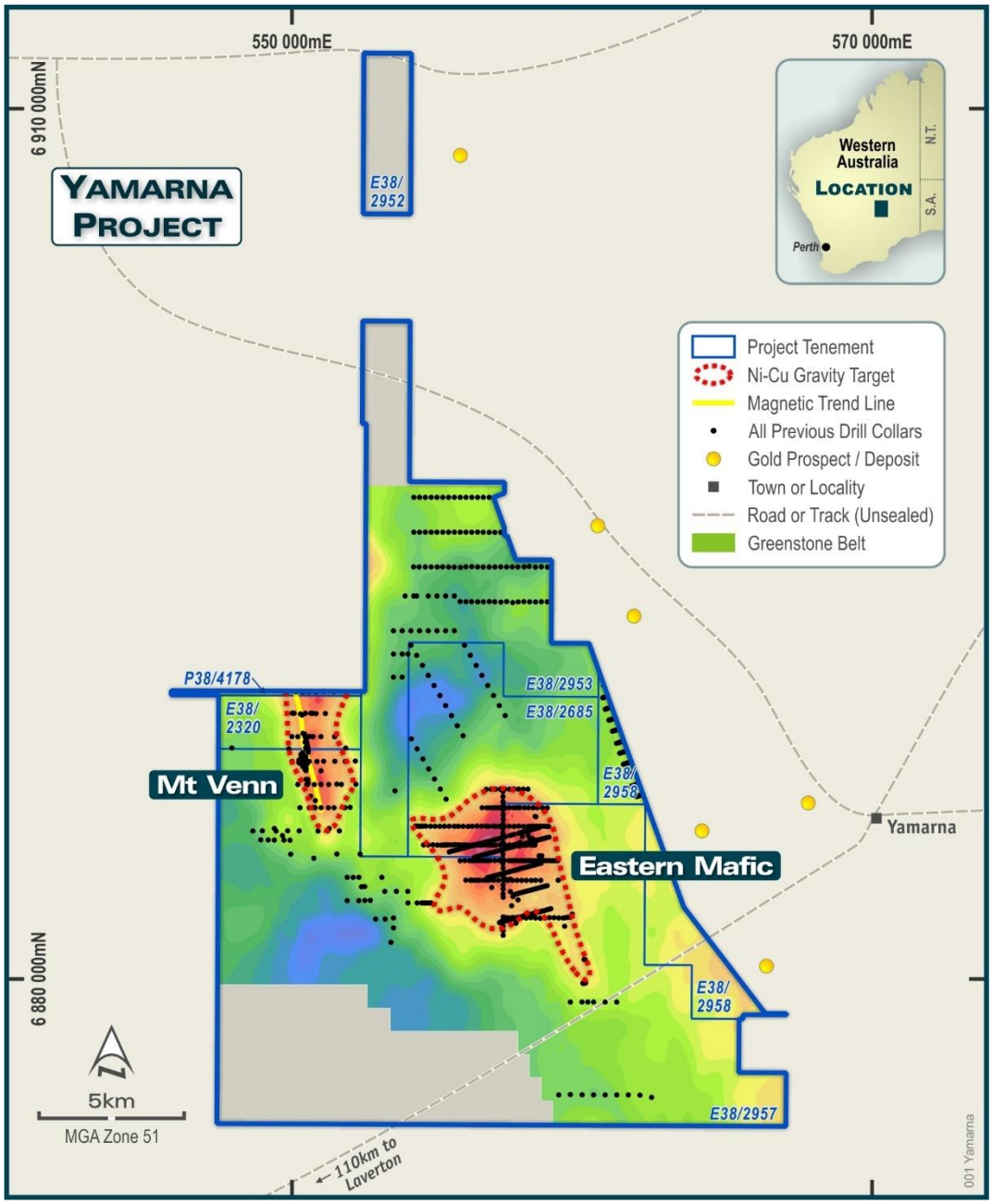

FIGURE 2: YAMARNA PROJECT – DRILL COLLARS OVER GRAVITY.

For further information contact:

Andrew Paterson
Managing Director
Great Boulder Resources Limited
admin@greatboulder.com.au

Media
For further information, please contact:
Paul Armstrong
Read Corporate +61 8 9388 1474

About Great Boulder Resources

Great Boulder is a mineral exploration company with projects in the Eastern Goldfields region of Western Australia. With a focus on base metals and gold, the Company has a range of projects from greenfields through to advanced exploration. With advanced copper-nickel-cobalt projects including Mt Venn and Winchester and the Whiteheads gold project plus the backing of a strong technical team, the Company is well positioned for future success.

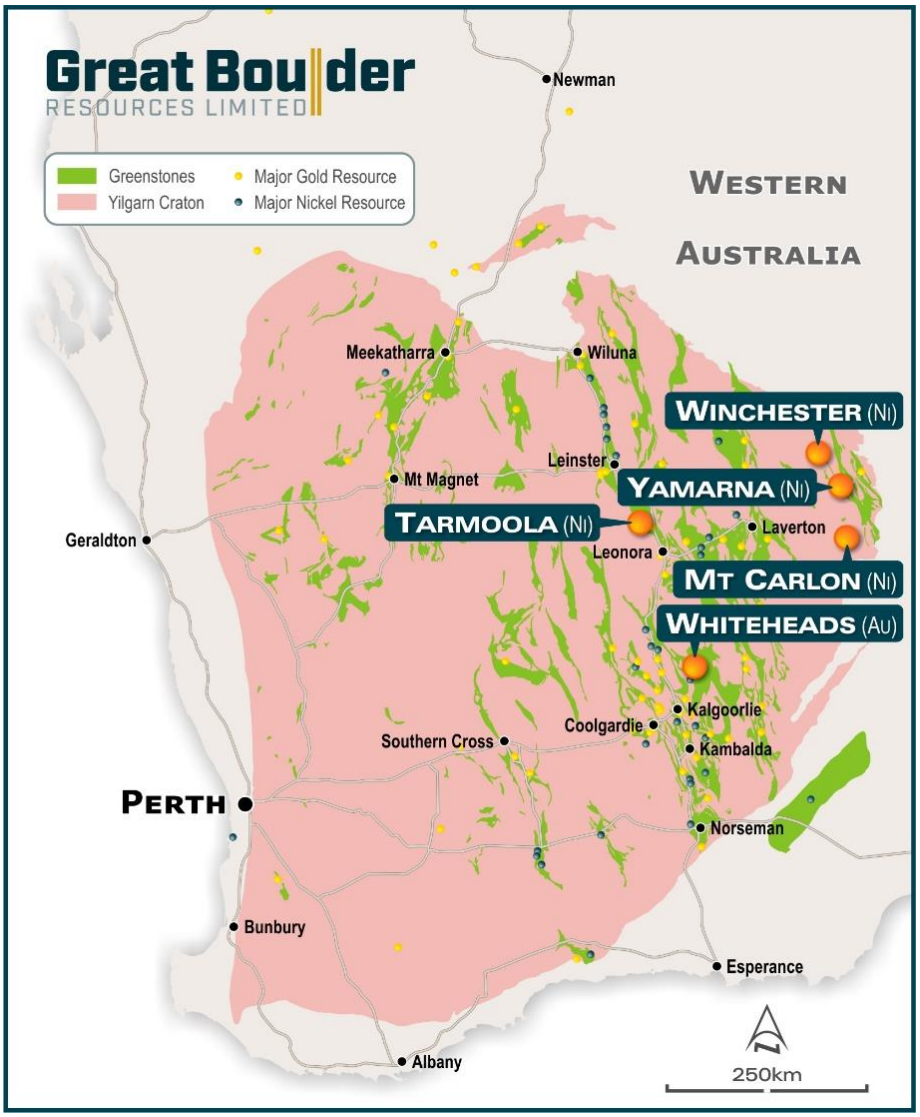

FIGURE 3: GREAT BOULDER PROJECTS

Competent Person's Statement

Exploration information in this Announcement is based upon work undertaken by Mr Andrew Paterson who is a Member of the Australasian Institute of Geoscientists (AIG). Mr Paterson has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a 'Competent Person' as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves' (JORC Code). Mr Paterson is an employee of Great Boulder Resources and consents to the inclusion in the report of the matters based on their information in the form and context in which it appears.

Hole ID	Easting	Northing	RL	Depth	Dip	Azimuth	Grid	To
17MVRC004	550348	6889092	412	102	-60	275	MGA94_51	36

	From	To	Width	Ag (ppm)	Cu (ppm)	Ni (ppm)	Pb (ppm)	Zn (ppm)
	48	52	4	3.9	739	319	1,110	6,940
	52	56	4	3.2	711	295	667	3,460
	56	57	1	2.1	649	240	509	1,630
	57	58	1	2.3	540	189	3,510	9,770
	58	59	1	3.1	572	191	4,510	**20,100**
	59	60	1	4.0	635	220	3,360	**22,400**
Total	***48***	***60***	***12***	***3.3***	***683***	***275***	***1,583***	***7,958***

TABLE 1: COLLAR AND ASSAY DATA FOR HOLE 17MVRC004 48 – 60M.

Appendix 2 - JORC Code, 2012 Edition Table 1

The following table relates to exploration activities undertaken at the Yamarna Project.

Section 1 Sampling Techniques and Data

(Criteria in this section apply to all succeeding sections.)

Criteria	Commentary
Sampling techniques	Reverse circulation drilling (RC) was used to produce a 1m bulk sample and representative 1m split samples (nominally a 12.5% split) were collected using a cone splitter. Geological logging was completed and mineralised intervals were determined by the geologists to be submitted as 1m samples. In intervals assessed as unmineralised 4m composite (scoop) samples were collected for laboratory for analysis. If these 4m composite samples come back with anomalous grade the corresponding original 1m split samples are then routinely submitted to the laboratory for analysis. The samples were crushed and split at the laboratory, with up to 3kg pulverised, with a 50g sample analysed by Industry standard methods. The sampling techniques used are deemed appropriate for the style of exploration.
Drilling techniques	Reverse Circulation drilling used 140 to 130mm diameter drill bits. RC drilling employed face sampling hammers ensuring contamination during sample extraction is minimised.
Drill sample recovery	Drilling techniques to ensure adequate RC sample recovery and quality included the use of "booster" air pressure. Air pressure used for RC drilling was 700-800psi. Logging of all samples followed established company procedures which included recording of qualitative fields to allow discernment of sample reliability. This included (but was not limited to) recording: sample condition, sample recovery, sample split method. Of the 3,065m of RC drilling during this 2017 program, overall logging of all sample recovery recorded 87% "good", 3% "moderate', 10% poor. Logging of the sample condition recorded 85% "dry", 3% "moist", 12% "wet". RC sample intervals recorded 39% 1m split samples, and 61% 4m composite samples (note: generally composite samples are in unmineralised zones) No quantitative analysis of samples weights, sample condition or recovery has been undertaken. No quantitative twinned drilling analysis has been undertaken at the project.
Logging	Geological logging of drilling followed established company procedures. Qualitative logging of samples includes lithology, mineralogy, alteration, veining and weathering. Abundant geological comments supplement logged intervals.
Sub-sampling techniques and sample preparation	Splitting of RC samples occurred via cone splitter by the RC drill rig operators. Cone splitting of RC drill samples occurred regardless of the sample condition. Samples taken were typically between 1.5-3.3kg. All samples were submitted to ALS Minerals (Kalgoorlie) for analyses. The sample preparation included: • Samples were weighed, crushed (such that a minimum of 70% pass 2mm) and pulverised (such that a minimum of 85% pass 75um) as per ALS standards. • Analysis was undertaken for gold, platinum and palladium using, 30g charge for fire assay and ICP-AES (ALS method; PGM-ICP23) • A 4 acid digest and ICP-AES (ALS method; MS-ICP61) was used for 33 multi-elements. This also included Co, Cu, Ni, Zn. • For elements that reported over range, ALS used ore grade 4 acid digest and ICP-AES methods; (nickel) Ni-OG62, (copper) Cu-OG62, (sulphur) • Sulphur over range used ALS method S-IR08 (Leco Sulphur analyzer). Sample collection, size and analytical methods are deemed appropriate for the style of exploration.
Quality of assay data and laboratory tests	All samples were assayed by industry standard methods through commercial laboratories in Australia (ALS Minerals, Kalgoorlie). Typical analysis methods are detailed in the previous section and are consider 'near total' values.

	Routine 'standard' (mineralised pulp) Certified Reference Material (CRM) was inserted by Great Boulder at a nominal rate of 1 in 50 samples. Routine 'blank' material (unmineralised sand) was inserted at a nominal rate of 1 in 100 samples. No significant issues were noted. No duplicate or umpire checks were undertaken. The analytical laboratories provided their own routine quality controls within their own practices. No significant issues were noted..
Verification of sampling and assaying	No verification of sampling and assaying has been undertaken in this exploration programme. No twinned drilling has been undertaken. Great Boulder has strict procedures for data capture, flow and data storage, and validation. Limited adjustments were made to returned assay data; values returned lower than detection level were set to the methodology's detection level, and this was flagged by code in the database.
Location of data points	Drill collars were set out using a handheld GPS and final collar were collected using a handheld GPS. Sample locations were collected using a handheld GPS as was deemed acceptable for the nature of this programme. Downhole surveys were completed by the drilling contractors using the Reflex EZ-TRACK with a measurement taken every 30m downhole. Holes without downhole survey use planned or compass bearing/dip measurements for survey control. The MGA94 UTM zone 51 coordinate system was used for all undertakings.
Data spacing and distribution	The spacing and location of the majority of the drilling in the projects is, by the nature of early exploration, variable. The spacing and location of data is currently only being considered for exploration purposes. In intervals qualitatively logged as unmineralised, 4 metre composite (scoop) samples were taken from the RC drill holes. RC sample intervals recorded 39% in 1m splits, and 61% 4m composite sample.
Orientation of data in relation to geological structure	Drilling was nominally perpendicular to regional mineralisation trends where interpreted and practical. True width and orientation of intersected mineralisation is currently unknown. A list of the drillholes and orientations are reported with significant intercepts is provided as an appended table. The spacing and location of the data is currently only being considered for exploration purposes.
Sample security	Great Boulder has strict chain of custody procedures that are adhered to for drill samples. All sample bags are pre-printed and pre-numbered. Sample bags are placed in a polyweave bags (up to 5 samples) and closed with a zip tie such that no sample material can spill out and no one can tamper with the sample once it leaves the company's custody.
Audits or reviews	None completed.

Section 2 Reporting of Exploration Results

(Criteria listed in the preceding section also apply to this section.)

Criteria	Commentary
Mineral tenement and land tenure status	Great Boulder Resource Ltd (GBR) is comprised of several projects with associated tenements; Yamarna tenements and details; Exploration licences E38/2685, E38/2952, E38/2953, E38/5957, E38/2958, E38/2320 and prospecting licence P38/4178 where GBR has a 75% interest via a JV with Eastern Goldfields Mining Co Pty Ltd (EGMC). EGMC now has the right to contribute to expenditure in the project at its 25% interest level or choose to convert to a 2% Net Smelter Royalty (NSR). Should EGMC choose to convert its remaining interest into a 2% NSR, then GBR will have a 100% interest in the project.
Exploration done by other parties	Previous explorers included: • 1990's. Kilkenny Gold NL completed wide-spaced, shallow, RAB drilling over a limited area. Gold assay only. • 2008. Elecktra Mines Ltd (now Gold Road Resources Ltd) completed two shallow RC holes targeting extension to Mt Venn igneous complex. XRF analysis only, no geochemical analysis completed. • 2011. Crusader Resources Ltd completed broad-spaced aircore drilling targeting extensions to Thatcher's Soak uranium mineralisation. XRF anlaysis only, no geochemical analysis completed. • In late 2015 Gold Road drilled and assayed an RC drill hole on the edge of an EM anomaly identified from an airborne XTEM survey, identifying copper-nickel-cobalt mineralisation.
Geology	Great Boulder's Yamarna Project hosts the southern extension of the Mt Venn igneous complex. This complex is immediately west of the Yamarna greenstone belt. The mineralisation encountered in the Mt Venn drilling suggests that sulphide mineralisation is prominent along a EM conductor trend, and shows a highly sulphur-saturated system within metamorphosed dolerite and gabbro sequence. Visual logging of sulphide mineralogy shows pyrrhotite dominant with chalcopyrite.
Drill hole Information	A list of the drill hole coordinates, orientations and metrics is provided as an appended table.
Data aggregation methods	No grade truncations were applied to these exploration results. No weighted average techniques are applied to reported intervals No metal equivalents are used.
Relationship between mineralisation widths and intercept lengths	The orientation of structures and mineralisation is not known with certainty, but majority of the drilling drilling was conducted using appropriate perpendicular orientations for interpreted mineralisation.
Diagrams	Refer to figures in announcement.
Balanced reporting	It is not practical to report all historical exploration results from the project.
Other substantive exploration data	In late 2015 Gold Road drilled and assayed an RC drill hole on the edge of an EM anomaly identified from an airborne XTEM survey, identifying copper-nickel-cobalt mineralisation. Great Boulder subsequently re-assayed the hole and confirmed primary bedrock sulphide mineralisation, with peak assay results of 1.7% Cu, 0.2% Ni, 528ppm Co (over 1m intervals) over two distinct lenses. Great Boulder completed a ground based moving loop EM survey in September 2017 and reported extensive strong EM conductors and co-incident copper-nickel mineralisation from aircore geochemistry (refer to announcement dated 5 October 2017)
Further work	Further work is discussed in the document in relation to the exploration results.